

Association of Transportation Safety Information Professionals

Application for Best Practices Recognition
2004

Part One: Project Summary

Project Title: New York TraCS project

Project Description: Develop a front-end data collection system that meets the needs of the police officer, allows for uniform collection of required information, provide an infrastructure to allow the data to be sent electronically from the police to back-end users involved in highway safety management and develop a standardized data stream that will allow back-end users to electronically feed the data into their existing databases.

Nominating Person Contact Information:

Name: Lieutenant Leonard P. Casper

Title: Project Manager

Agency and Office: New York State Police,
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Project Manager Contact Information: Same as above

Lead Agency for Project: New York State Police

Participating/Cooperating Agencies (if any): This project is a cooperative venture of the New York State Association of Chiefs of Police, New York State Department of Motor Vehicles (DMV), New York State Department of Transportation (DOT), New York State Governor's Traffic Safety Committee (GTSC), New York State Police (NYSP), New York State Division of Criminal Justice Services (DCJS), New York State Park Police, New York State Sheriffs' Association, New York City Police Department, New York State Magistrates Association, New York State Association of Magistrates Court Clerks, the State Prosecutors Association, the New York State Office of Court Administration (OCA) and the New York State Office for Technology(OFT).

Additional members of project team are:

From NYSP

Lt. Leonard P. Casper
Zone Sgt. Michael Downey
Sergeant James A. Daily
T/Sgt William Collins
Lynne Bacon
Jan Buck
Natalie Cole
Jackie Boni
Michele Rainville
Joseph Schanz
Cathy Champion
Fred Scharf
Patricia Kelly-Sbrega

From DMV

Kenneth Rose
Thea Rosenthau
William Leonardo
William Butler

From DOT

John Shufon
Dave Clements

From OCA

John Steele
Joseph Lombardo

From GTSC

Kenneth Carpenter
Daniel Larkin

Which National Agenda goals apply? 1,2,3,4,5 and 6

Which steps in the management process does the project support? Establish Safety Goals, Identify Problems, Plan Programs/Countermeasures, Implement Programs, Monitor Program Operations and Evaluate Effectiveness.

Reference the priority in your traffic records strategic plan to which this project applies: The New York TraCS project applies to the overall State plan to reduce traffic crashes and the accompanying damage, injuries and death by providing accurate and timely crash data, by identifying the location of the crashes and their associated causation factors and allowing highway safety managers to correlate those causation factors with targeted enforcement efforts.

Project Cost: planned \$:15,620,599 actual \$:(to date) \$7,785,000

Extent of Project Implementation: The software for the traffic ticket, including the supporting deposition, equipment defect and correction form, change of address form and court and DMV ticket copies have been completed, tested and finalized and rolled out to pilot areas and are ready for deployment to the first wave of participating agencies in the statewide rollout. The software for the crash report and the associated motorist exchange of information form, truck/bus supplemental form and the fatal accident report form have been completed, tested and finalized and rolled out to pilot areas and are ready for deployment to the first wave of participating agencies in the planned statewide rollout.

An executive committee made up of high level managers from DOT, DMV, GTSC, DCJS, NYSP and the Governor's office, was formed and created a TraCS statewide rollout plan. The plan calls for a roll out of the TraCS system to the top 13 agencies in the state that produce the highest volume of crash reports and tickets annually. All combined, the top 13 agencies account for approximately 75% of all crash reports and traffic tickets generated in New York annually. As part of the rollout plan, a kickoff meeting was hosted by the GTSC. Training meetings for the top 13 agencies by the NYSP and DMV have already begun. So far, regional organizational meetings and

training meetings have been held in the Buffalo area (covering a five county area), Binghamton (six county area), Rockland, Nassau and Syracuse counties.

The TraCS system is currently being used in eight counties by over 180 vehicles supporting over 400 users. The infrastructure that provides the electronic means for police agencies to consolidate their data and then send it to the central gateway server where it is forwarded to the respective state agencies (DMV, DOT, OCA) is completed, tested and finalized, and up and running. Approximately 100 tickets and 30 accident reports from various areas of the state are being funneled through the system every day.

Summary of Project Benefits: What was improved, who benefited, and how? The traffic ticket and crash report developed and being used in the New York TraCS project have begun providing highway safety managers with accurate data. There are over 100 front-end edits in the traffic ticket and well over 300 front-end edits in the crash report that demand that the officer that collects the information provide accurate data to the system. The TraCS infrastructure allows data to flow electronically to DOT, DMV and OCA, thereby allowing those agencies to update their databases electronically, thus saving significant amounts of time usually spent manually entering the data. Through the paper system, it takes approximately 18 months for a crash report to be entered into the DMV system and even longer for it to be analyzed by DOT. The TraCS system sends the data electronically from the police to DOT and DMV on a daily basis. The police officers can collect the required data quickly by utilizing the timesaving features of the TraCS system, which contributes to the clearing of the scene quicker and the normalization of traffic flow. Tickets that used to take 5 to 10 minutes to complete can now be done in the TraCS system in about two and one half minutes.

Part Two: Project Detail

Project Description: Form a coalition of agencies involved in highway safety to improve New York's paper-based handwritten traffic ticket and crash reporting system. Ensure the solution includes an automated front-end data collection piece, an infrastructure for the electronic transfer of data from the police agencies to a central location where the information can be collected and transferred to the various State, County and Local agencies that require that information to base their highway safety and highway management programs on, and, a back-end database of the collected data that allows highway safety managers to query the information and correlate the traffic ticket and crash report data and then map those areas that indicate a high frequency of crashes based on the accompanying causation factors.

Referring to the National Agenda Goals, tell how your project relates to each one you listed in Part One of this application:

1. High level executives from DMV, GTSC, DCJS, DOT and NYSP have met and briefed the Governor's office on the TraCS project and the plan to rollout TraCS statewide. The Governor's office directed that funds be found for the TraCS statewide rollout. The GTSC and DOT re-directed \$5.8 million in state grant monies received from the federal government towards the rollout of TraCS to the top 13 police agencies in the state to allow them to purchase equipment necessary to utilize the TraCS system.
2. The TraCS project includes an infrastructure that provides police agencies with an electronic means to send their crash reports and traffic tickets to DMV, DOT and OCA. The electronic infrastructure includes the ability to send data back from DOT, DMV and

OCA to the police agencies and each other, including traffic ticket dispositions on such things as convictions of violations by drivers with commercial vehicle licenses.

3. TraCS will allow police agencies to send crash reports and traffic tickets electronically to DOT and DMV. This will result in the data being entered in a timely manner. With timely data, highway safety managers can analyze crash data and map the information for police agencies, based on causation factors. The police agency managers can then direct their limited resources towards targeted enforcement to the most problematic areas.

4. We included every major highway safety agency in our state in the development of our entire system. The data collected includes hundreds of front-end edits and auto-populate features to ensure the data we collect and electronically send will be accurate. We consulted with our highway safety partners when we developed our infrastructure to ensure the data stream was in a format that was easy for them to import into their existing back-end databases.

5. Crash report data collected in the TraCS software includes important location information that allows officers to accurately pinpoint crashes and their causation factors. Within the TraCS system, we've developed a user guide, technology guide, training guide and supervisor's guide. These guides explain to users and supervisors alike, how to utilize the system and mine important data from the TraCS database.

6. The TraCS project required us to develop an electronic data stream that we could send to highway safety managers at DMV, DOT and OCA. In order to send the data, we had to bring all of the agencies together and agree on such things as charge codes, location identifiers, tables for drop down boxes and other required fields. We also had to come up with a standardized data stream so the information we sent from the various police agencies could be automatically incorporated into the existing back-end databases at DMV, DOT and OCA. This led us to developing a "uniform traffic ticket and uniform crash report for our state for all agencies to use.

Referring to the management approach to highway safety, tell how your project supports the management steps you listed in Part One:

1. Establish Safety Goals: The TraCS project brought together every major agency within the state that has a stake in highway safety and got them to agree to a project description. The project description included issues and goals important to each agency. With the TraCS system now in place, highway safety managers will be able to receive timely data on crashes and the data will be significantly more accurate. This timely and accurate data will allow highway safety managers to pinpoint and map problem areas and identify worrisome causation factors. With the problem areas identified, highway safety managers can then set realistic goals to improving motorists safety.

2. Identify Problems: The TraCS system developed in New York includes a back-end database with full query functionality. Highway safety managers will be able to query the database to find areas of concern and identify unfavorable driving habits before they become entrenched in the motoring public. The quicker the problems are identified, the greater the chance of success for highway safety managers to correct the problem and avoid further damage, injury or even death.

3. Plan Programs/Countermeasures: Timely data from the TraCS project will allow highway safety managers to mount media campaigns and targeted enforcement efforts quickly. Quick action will lead to more lives being saved and a safer highway for the motoring public.

4. Implement Programs: The key to implementing highway safety programs is to obtain the proper resources. The TraCS system will provide highway safety managers with a wealth of accurate and timely information that they can utilize to obtain the backing of their respective budget executives.

5. Monitor Program Operations: The TraCS system will provide highway safety managers with timely and accurate data on crash locations and causation factors. With this data, the limited resources available can be targeted directly to problem areas. For instance, highway safety managers will be able to identify where crashes are occurring with speed as the causation factor and then assign enforcement personnel to blanket that area. As the program continues, highway safety managers will be able to make timely analysis of the effectiveness of the enforcement and make necessary adjustments to the program.

6. Evaluate Effectiveness: With timely data from the TraCS system, highway safety managers will be able to continuously evaluate the effectiveness of the program and make necessary adjustments to ensure success.

Describe the major process steps for your project, including any unique aspects that enhanced success: The first major step in this project was to bring all of the agencies involved in highway safety together and get them to identify their goals. Once that was accomplished, the next step was to look for a solution to help everyone reach their respective goals. This was accomplished by sending out a "Request for Information" to over 140 companies throughout the United States and Canada to see what solutions were available. After evaluating all of the potential solutions, a small team was assembled with representatives of the major agencies in highway safety included. The small team then traveled to sites around the nation where working examples of potential solutions were in place. The best way to determine a program's worth is to talk to the actual users of the product. Our research led us to pick the Iowa TraCS software as the best solution for our state.

Once we reached this decision, we then set up a pilot of the TraCS software to make sure our decision was correct before we committed completely to the solution. During the pilot, we polled the users every 30 days with various evaluations of not only the TraCS software, but of the hardware solutions as well. The results were overwhelmingly in favor of the TraCS system.

The next step was to begin work on an infrastructure that would be able to carry the TraCS data electronically from the front-end users (police) to the back-end users (DMV, DOT, OCA) who wanted timely and accurate data for which to base their highways safety plans on. At the same time we were building the infrastructure, we formed a team to develop the back-end database. During this entire time, the core TraCS team continued to elicit feedback from the users on ways to make the TraCS software even better. This feedback was evaluated and led to significant enhancements to the TraCS system, not just for New York, but for all of the other states as well.

The final step in this project is the rollout of the software to the front-end users. With over 500 police agencies in the state, a plan had to be developed to ensure TraCS was made available to as many agencies as possible while ensuring that enough support personnel were available to provide quality training and support. The solution we came up with is two-fold. First, we identified the top 13 agencies in the state that account for approximately 75% of all of the traffic tickets and accident reports completed in the state. These agencies also happened to have their own technology units. The next step was to bring them together and offer them the free TraCS software and provide them with funding for equipment and training for their technology staffs. The

catch being that if they take the funding, that they agree to use their technology staffs to help other agencies around them. In other words, after we trained them, they became the “lead” agency in their area and trained the other agencies.

The second part of the rollout plan was to set up “regional” training seminars across the state for police agencies that either had the necessary equipment to utilize TraCS or had a technology staff. This would allow us to reach out to the midsize to smaller police agencies without over taxing our own TraCS support staff. Our two-fold plan has already begun and has met with great success. As a matter of fact, after we did the first “regional” training, we didn’t have to reach out to other areas, they reached out to us. As these new agencies contact us, we set up group meetings and explain to them what they need to do to get organized and prepare for the TraCS software.

Provide the evidence and reasoning used to determine the success of the project:

We consider our project a success so far for several reasons. First is because once we made it known that the software was completed and available, we’ve been inundated with requests for the TraCS system. Most of these requests for the system were based on agencies observing it working with another agency in their area. The second reason we consider our project a success so far, is because we presented our project and our rollout plan to the Governor’s office and received immediate backing, including funding. A third reason we consider our project to be successful is because our infrastructure is up and running and we’re able to send traffic ticket and crash report data electronically from police agencies to the various end-users, such as DOT, DMV and OCA. The fourth reason is based on the fact that we have over 100 edits in the traffic ticket and over 300 edits in the crash report in the front end of our software, which ensure that the data being collected by the police is accurate.

Why should this project be recognized as a best practice in traffic records?

The New York TraCS project will not only help highway safety managers in our state, but the work we’ve done will help other states improve their own systems. The enhancements we’ve made to the base TraCS system are beneficial to other states and our infrastructure is an excellent model for states to follow as they set up their own internal electronic systems. And finally, throughout the entire project, we’ve included our federal partners from the Federal Highway Administration, the Federal Motor Carrier Safety Administration and the National Highway Traffic Safety Administration. And because we included our federal partners, the data we’re collecting meets their needs and will be in a format that will make it easy for us to send to them.

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